

1 1. (amended) An apparatus for decreasing the propagation delay time of an electrical signal
2 transmitted from a source along a conductor in a circuit, the apparatus comprising:
3 a first conductor having a length extending from a first area of the circuit to a second
4 area of the circuit and for carrying an electrical signal, the first conductor having a first end
5 electrically coupled to the source capable of providing the electrical signal and a second end
6 electrically coupled to a destination;
7 a second conductor having a length extending from the first area of the circuit to the
8 second area of the circuit and located proximate the first conductor and extending substantially
9 parallel and along the first conductor, the second conductor having a first end electrically
10 coupled in the first area of the circuit to the source and having a second end unconnected in the
11 second area of the circuit; and
12 a third conductor having a length extending from the first area of the circuit to the second
13 area of the circuit and located proximate the first conductor and extending substantially parallel
14 and along the first conductor, the third conductor having a first end electrically coupled in the
15 first area to the source and having a second end unconnected in the second area of the circuit,
16 and wherein the second and third conductors reduce the effective capacitance of the first
17 conductor thereby increasing the speed of the electrical signal when transmitted along the first
18 conductor, wherein the second conductor is disposed below the first conductor and the third
19 conductor is disposed above the first conductor.

1 3. (amended) The apparatus in accordance with Claim 1, further comprising:

2 a fourth conductor having a length extending from the first area of the circuit to the

3 second area of the circuit and located proximate the first conductor and extending substantially

4 parallel and along the first conductor, the fourth conductor having a first end electrically

5 coupled in the first area of the circuit to the source and having a second end unconnected in the

6 second area of the circuit; and

7 a fifth conductor having a length extending from the first area of the circuit to the second

8 area of the circuit and located proximate the first conductor and extending substantially parallel

9 and along the first conductor, the fifth conductor having a first end electrically coupled in the

10 first area to the source and having a second end unconnected in the second area of the circuit,

11 wherein the first conductor, the fourth conductor and the fifth conductor are located

12 substantially in a first plane.

1 4. (amended) The apparatus in accordance with Claim 3 wherein all of the conductors each

2 comprise metal.

1 5. (amended) The apparatus in accordance with Claim 3 further comprising:
2 sixth and seventh conductors each having a length extending from the first area of the
3 circuit to the second area of the circuit and located proximate the first conductor and extending
4 substantially parallel and along the first conductor, the sixth and seventh conductors each having
5 a first end electrically coupled in the first area to the source and having a second end
6 unconnected in the second are of the circuit; and
7 eighth and ninth conductors each having a length extending from the first area of the
8 circuit to the second area of the circuit and located proximate the first conductor and extending
9 substantially parallel and along the first conductor, the eighth and ninth conductors each having
10 a first end electrically coupled in the first area to the source and having a second end
11 unconnected in the second arc of the circuit.
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1 6. (amended) The apparatus in accordance with Claim 5 wherein the second, sixth and seventh
2 conductors are located substantially in a second plane and the third, eighth and ninth conductors
3 are located substantially in a third plane.

1 9. (unchanged) The apparatus in accordance with Claim 1 wherein the electrical signal
2 comprises a clock signal, and wherein the apparatus reduces the propagation delay of the clock
3 signal when transmitted on the first conductor.

1 10. (unchanged) The apparatus in accordance with Claim 1 wherein the length of the first
2 conductor is greater than about 1000 microns.

1 11. (amended) An electrical conductor for increasing the speed of an electrical signal
2 transmitted along the conductor in an integrated circuit, the conductor comprising:

3 a first conductor having a first end in a first area of the integrated circuit and a second
4 end in a second area of the integrated circuit, and having a length extending from the first area
5 to the second area;

6 a second conductor located proximate the first conductor and having a first end in the
7 first area of the integrated circuit and a second end in a second area of the integrated circuit, and
8 extending substantially parallel and along the first conductor from the first area to the second
9 area;

10 a third conductor located proximate the first conductor and having a first end in the first
11 area of the integrated circuit and a second end in a second area of the integrated circuit, and
12 extending substantially parallel and along the first conductor from the first area to the second
13 area, wherein the second conductor is disposed below the first conductor and the third conductor
14 is disposed above the first conductor;

15 first means for electrically coupling the first end of the first conductor to the first end of
16 the second conductor, and wherein the second end of the first conductor and the second end of
17 the second conductor are not electrically coupled in the second area of the integrated circuit; and

18 second means for electrically coupling the first end of the first conductor to the first end
19 of the third conductor, and wherein the second end of the first conductor and the second end of
20 the third conductor are not electrically coupled in the second area of the integrated circuit.

1 13. (amended) The electrical conductor in accordance with Claim 11, further comprising:

2 a fourth conductor having a length extending from the first area of the circuit to the
3 second area of the circuit and located proximate the first conductor and extending substantially
4 parallel and along the first conductor, the fourth conductor having a first end electrically
5 coupled in the first area of the circuit to the source and having a second end unconnected in the
6 second area of the circuit; and

7 a fifth conductor having a length extending from the first area of the circuit to the second
8 area of the circuit and located proximate the first conductor and extending substantially parallel
9 and along the first conductor, the fifth conductor having a first end electrically coupled in the
10 first area to the source and having a second end unconnected in the second area of the circuit,

11 wherein the fourth conductor and the fifth conductor are located substantially in the same
12 plane as the first conductor.

1 14. (unchanged) The electrical conductor in accordance with Claim 11 wherein the coupling
2 of the first conductor to the second conductor and to the third conductor decreases the effective
3 capacitance of the first conductor thus decreasing the propagation delay time of an electrical
4 signal when transmitted along the first conductor from the first area to the second area of the
5 integrated circuit.

1 16. (unchanged) The electrical conductor in accordance with Claim 11 wherein the length of
2 the first conductor is greater than about 1000 microns.

1 17. (amended) A conductor for transmitting a clocking signal from a first area to a second area
2 of an integrated circuit, the conductor comprising:

3 a first elongated conductive portion having a first end and a second end extending from
4 the first area to the second area;

5 a second elongated conductive portion having a first end and a second end and located
6 proximate and space apart from the first conductive portion and extending substantially parallel
7 with the first conductive portion from the first area to the second area;

8 a third elongated conductive portion having a first end and a second end and located
9 proximate and space apart from the first conductive portion and extending substantially parallel
10 with the first conductive portion from the first area to the second area, wherein the second
11 conductive portion is disposed below the first conductive portion and the third conductive
12 portion is disposed above the first conductive portion;

13 means for electrically connecting the first end of the first conductive portion to the first
14 end of the second conductive portion;

15 means for electrically connecting the first end of the first conductive portion to the first
16 end of the third conductive portion;

17 a source located within the first area and coupled to the first ends of the first, second and
18 third conductive portions and capable of generating a clocking signal for transmission on the
19 first conductive portion from the first area to the second area; and

20 3 wherein the first end of the first conductive portion is connected to a destination in the
1 *JK* second area, and the first ends of the second and third conductive portions are unconnected to
2 *2WC* the destination.

1 18. (unchanged) The conductor in accordance with Claim 17 wherein the second conductive
2 portion and the third conductive portion reduce the capacitive effects on the first conductive
3 portion thereby reducing the propagation delay of the clocking signal when transmitted from
4 the first area to the second area.

1 19. (unchanged) The conductor in accordance with Claim 18 wherein the respective length of
2 each of the first conductive portion, the second conductive portion, and the third conductive
3 portion is greater than about 1000 microns.

Please add the following new claims:

1 21. (newly added) A conductive structure for decreasing signal propagation delay, comprising:
2 a first conductor;
3 a second conductor substantially parallel to the first conductor;
4 at least one switch selectively connecting the first conductor to the second conductor,
5 wherein the first and second conductors carry a single signal when the switch is closed and are
6 available to carry independent signals when the switch is open.

1 22. (newly added) The conductive structure in accordance with Claim 21, wherein the at least
2 one switch is closed when the conductive structure carries a signal requiring reduced
3 propagation delay and is open when the conductive structure carries a signal not requiring
4 reduced propagation delay.

1 23. (newly added) The conductive structure in accordance with Claim 21, further comprising:
2 a third conductor substantially parallel to the first conductor;
3 at least one other switch selectively connecting the first conductor to the third conductor,
4 wherein the first, second and third conductors carry a single signal when the switch is closed
5 and are available to carry independent signals when the switch is open.

1 24. (newly added) The conductive structure in accordance with Claim 23, wherein the at least
2 one switch and the at least one other switch each further comprise:

3 a first switch proximate a first end of a respective pair of the first, second and third
4 conductors; and

5 a second switch proximate a second end of a respective pair of the first, second and third
6 conductors.

1 25. (newly added) The conductive structure in accordance with Claim 23, wherein the second
2 conductor is disposed proximate to and below the first conductor and the third conductor is
3 disposed proximate to and above the first conductor.

1 26. (newly added) The conductive structure in accordance with Claim 23, wherein the second
2 and third conductors decrease an effective capacitance of the first conductor when the at least
3 one switch and the at least one other switch are closed, decreasing propagation delay of an
4 electrical signal transmitted along the first conductor.